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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/564,566

01/13/2006

Michael Daniels

TFEL0001

2026

30438

7590

05/08/2008

SMYRSKI LAW GROUP, A PROFESSIONAL CORPORATION  
3310 AIRPORT AVENUE, SW  
SANTA MONICA, CA 90405

EXAMINER

PATEL, VINOD D

ART UNIT

PAPER NUMBER

3742

MAIL DATE

DELIVERY MODE

05/08/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/564,566	<b>Applicant(s)</b> DANIELS ET AL.	
	<b>Examiner</b> VINOD D. PATEL	<b>Art Unit</b> 3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 12-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 12-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/11/08, 8/1/06, 1/13/06</u> .                                | 6) <input type="checkbox"/> Other: _____                          |

***Election/Restrictions***

1. Applicant's election without traverse of Group I, claims 1-3 and 12-18, drawn to a heating cable in the reply filed on 2/11/08 is acknowledged.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-3 and 12-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Regarding claim 1, line 9 & 11, the phrase "it" renders the claim indefinite because it is unclear what "it" refers to. See MPEP § 2173.05(d).

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Cole (US5403992).

Cole discloses a heating cable (Figure 1-2, column 4, line 40) comprising a first conductor (8, R2) which extends along the length of the cable, a second conductor (R1) which extends along the length of the cable, a separation layer (10) which extends along the length of the cable and is interposed between the first and second conductors,

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and an outer insulating jacket (7) extending along the length of the cable and around the first and second conductors and the separation layer, wherein the first and second conductors are connected (D3) at one end of the cable in series (column 4, line 52) such that if the first and second conductors are connected at the other end of the cable to respective poles of a power supply equal currents flow in opposite directions through adjacent portions of the conductors, the first conductor having a PTC characteristic (column 7, lines 45-50) and the separation layer having NTC characteristic (column 5, lines 29-37).

The heating cable, wherein the first and second conductors are coaxial and the separation layer is tubular, the first conductor being located inside the tubular separation layer and the second conductor being located outside the tubular separation layer as shown in the Figure 2.

The heating cable, wherein the first conductor (8, R2) is formed from twisted together components each of which comprises a fibre core (8) around which a positive temperature coefficient wire (R2) has been wrapped to form a helix as shown in the Figure 2.

The heating cable, wherein the second conductor (R1) is a heating wire wrapped around the tubular separation layer to form a helix as shown in the Figure 2.

The heating cable, wherein the separation layer has a negative temperature characteristic (column 5, lines 29-37).

The heating cable, wherein the separation layer is formed such that it melts if heated to a predetermined threshold temperature (column 5, lines 67-68, column 6, lines 1-3).

7. When filing an amendment an applicant should show support in the original disclosure for new or amended claims. See MPEP § 714.02 and § 2163.06 (“Applicant should \* \* \* specifically point out the support for any amendments made to the disclosure.”).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VINOD D. PATEL whose telephone number is (571)272-4785. The examiner can normally be reached on 7.15 A.M. TO 3.45 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Tu B. Hoang can be reached on 571-272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vinod D. Patel/ 4/9/08  
Examiner, Art Unit 3742  
/TU B HOANG/  
Supervisory Patent Examiner, Art Unit 3742